Santa Clara Water Pollution Control Plant Service Area Resident Survey

Conducted for:

The City of San José
Environmental Services Department

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EVANS/McDONOUGH
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Opinion Research &
Strategic Services

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I. EXECUTIVE SUMMARY

Evans/McDonough Company Inc. recently completed a telephone survey for the City of San Jose Environmental Services Department of 513 randomly selected residents in the City of San Jose/Santa Clara Water Pollution Control Plant service area. The survey addresses opinions and practices related to watershed pollution. The following are key findings from the survey.

1. Key Findings

- Traffic (90% serious) and unemployment (83% serious) top the list of concerns in the Valley, but pollution is also a serious problem for most (72% water pollution is a serious problem and 75% say smog is serious.)
- Most respondents have not heard anything recently about recycled water (77%), but those who have felt positively about it.
- Few respondents are familiar with the term watershed (6%) and are able to define the term.
- Respondents are unclear about the differences between storm drains and sewers, but awareness of freshwater damaging the Bay appears to have increased in recent years.
- Few respondents report taking actions that would help to prevent storm drain pollution. However, many respond that they are willing to recycle oil (57%) and use a car wash (49%).

2. recommendations

Given the results of the survey there are a number of possible strategic actions that the Department may want to consider regarding communications.

Watershed Pollution

- Awareness of the term "watershed" is extremely low and there is confusion about the differences between storm drains and sewers. Communication will likely be most effective if it is focused on specific actions that could help prevent water pollution (such as don't use pesticides and don't wash your car in the driveway) rather than on education about the water system.
- Survey respondents indicate that they are willing to take pollution prevention actions, but since they are not taking these actions currently it is likely that they just don't see the connection between these actions and the pollution of the storm drain.
- Any efforts to communicate about the watershed should be combined with messages regarding specific steps that can be taken to reduce pollution. For instance, explanation of a watershed alone is confusing. A description of what happens to the water than runs off your car when you wash it in the driveway can be much more powerful.
- Some of the specific actions that you may want to consider promoting are pollution prevention efforts that are easy to do and are applicable to most people.
  - Using non-polluting brake pads on cars;

- Taking left over paints, insecticides and other hazardous wastes to household hazardous waste collection centers;
- Using non-toxic substances rather than pesticides and herbicides to control pests and weeds in lawns and gardens;
- Sweeping down the driveway with a broom instead of hosing it down with water.

II. METHODOLOGY

The following report highlights the results of the recently completed survey of residents in the City of San Jose/Santa Clara Water Pollution Control Plant service area. The survey was conducted February 16-21, 2002. Five hundred and thirteen residents were interviewed by telephone, by trained professional interviewers. The surveys were offered in Vietnamese, Spanish and English. The majority took the survey in English (469), 38 respondents took the survey in Spanish and 6 people took the survey in Vietnamese. The margin of error for a survey like this is $\pm$ 4.4 percentage points.

Where appropriate, results are compared to data from the 1999 FMMA Santa Clara runoff pollution prevention program survey (FMMA '99). The survey was conducted in the City of San Jose/Santa Clara Water Pollution Control Plant service area, while the 1999 FMMA survey included cities that were outside the service area. Therefore it is important to note that although we tried to maintain the same wording of questions from previous surveys, some of the change, especially with regard to the FMMA survey, may be partially due to the fact that they interviewed in a slightly different geographic area. There are also other elements that may influence differences such as placement in the survey, timing and interviewing services used. These differences slightly bias our ability to compare results. Therefore the comparisons with other years should be taken as suggestions rather than fact and caution should be used when drawing conclusions.

III. INTRODUCTION

This introduction discusses questions that gauge respondents' feelings about environmental concerns. These questions are important to consider, as they place respondents' concern about water issues with respect to other local issues.

In our 'warm-up' questions common problems were tested for their seriousness as well as water quality and other water related issues. We found that traffic and unemployment top the list of concerns in the Valley, but pollution is also a serious problem for most.

When asked to rate the seriousness of various problems in the region, it is no surprise that traffic congestion receives the highest serious ratings with 90% of respondents saying traffic is a "very or somewhat serious" problem. Concerns over traffic received slightly higher serious ratings in past surveys with 93% very/somewhat serious in 1997 and 95% who said this in 1999.

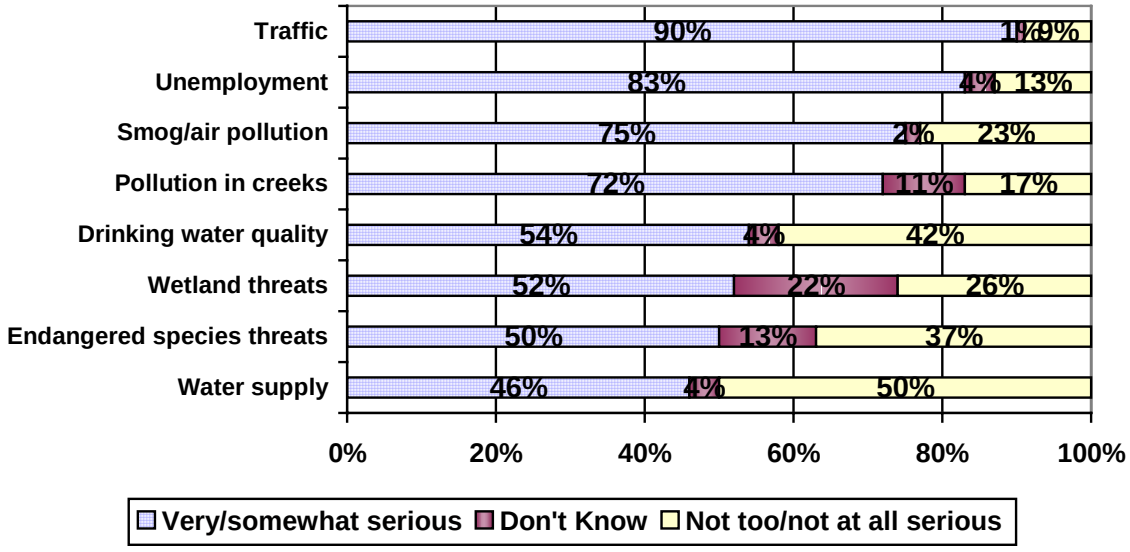
"Unemployment, the loss of jobs" was ranked as the second most serious local issue - 83% said this is a very/somewhat serious problem. Concern over unemployment has risen sharply over time as only 52% of respondents said it is a very/somewhat serious problem in the FMMA '99 survey, a positive net change of 61 points.

Other problems in the region that received high seriousness ratings are "smog or air pollution" (75% very/somewhat serious) and "pollution of water in local creeks, streams and the San Francisco Bay" (72% very/somewhat serious).

Respondents do not appear to feel that problems with drinking water quality, the threats to the wetlands, threats to endangered species or the water supply are that great. It must be noted that in trying to communicate messages about water conservation or wetland threats, that although they may be well received, it is not a top concern for most residents. Water conservation may be important to many but 50% say that it is not too/not at all a serious issue.

Graph 1 on the next page shows the 'seriousness' of each problem by respondents.

Graph 1: Seriousness of Problems in the Region



IV. WATERSHED POLLUTION

1. Key Findings

- Few respondents are familiar with the term watershed (6%) and are able to define the term.
- Respondents are unclear about the differences between storm drains and sewers, but awareness of freshwater damaging the Bay appears to have increased in recent years.

- Few respondents report taking actions that would help to prevent storm drain pollution. However, many respond that they are willing to recycle oil (57%) and use a car wash (49%).

2. Familiarity with Watershed Watch

Awareness of Watershed Watch is low with only 6% n=33 who said yes, they recall seeing or hearing something recently, 90% who said no and 4% who said don't know. Of the 6% or 33 people who responded yes:

- 35% mentioned where they heard or saw something (2% of total)
- 32% did not know what they heard or saw (2% of total)
- "Water that is in the drain" – 6% (less than 1% of total)
- "Something to do with water contamination" – 9% (less than 1% of total)
- "I heard a song about conservation" – 3% (less than 1% of total).

Respondents cannot define the term watershed, and it appears that knowledge of the term has decreased over the last few years. All respondents were then asked to describe what a watershed is in their own words.

- The most common answer was an "area where water collects and then drains to lower elevation or water that drains over land" which was said by 12%.
- In comparison in the FMMA '99 survey 27% said the same.
- 64% of respondents today said they 'did not know' how to define the term watershed, which is an increase of 25 points from the 1999 FMMA survey where 39% said don't know.
- 'A pond/reservoir to collect water' – 9%,
- 'A structure of building for holding or keeping water/shed/tank'-6%,
- 'The underground water supply' –4%.

3. Storm drain knowledge

Respondents do not know the difference between storm drains and sewers and knowledge has not changed since the '99 FMMA survey.

Table VI.3.1 Storm drains and sewers are part of the same underground	Definitely/Probably True	(Don't know)	Probably/Definitely Not True

system? A: Not true			
1999	51%	10%	39%
2002	46%	21%	31%
	-5%	+11%	-8%

The net effect is counteractive and although 5% fewer people thought it was true, 8% fewer thought it wasn't true – more respondents did not know. There appears to be no change in the knowledge overall.

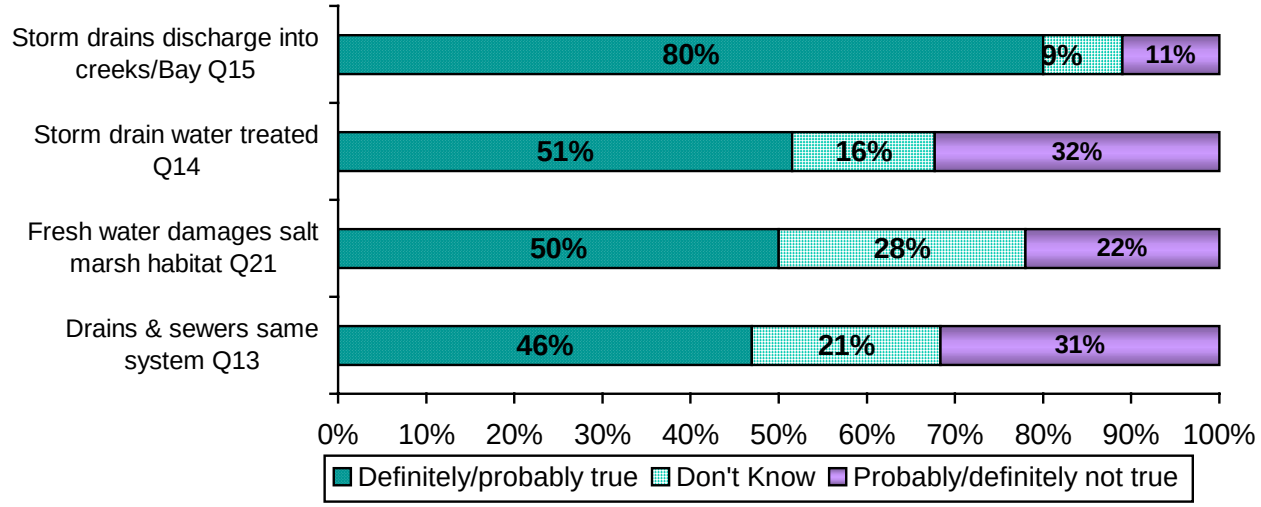
Respondents were also asked if the statement "the water and other substances that flow through the storm drain system are treated and filtered to remove wastes before they are discharged from the system" was true. Again, it appears that in comparison to the '99 FMMA survey, fewer people know that the statement is not true and a larger percentage responded that they did not know. 49% in '99 and 32% in '02 said the statement was probably or definitely not true – while 41% in '99 and 51% in '02 said it was probably true.

One watershed message does appear to have made some headway in the last few years. Respondents were asked to determine whether or not the following statement was true: "Too much fresh water from our waste treatment plant is damaging the salt marsh habitat of the Bay." This question was not addressed in the '99 FMMA survey but was asked 2 years earlier in the '97 GLS survey. At that time 40% of respondents said that the statement was true, (which is correct) while 19% said it was not true. In 2002, 50% of respondents said the statement was true and 22% said it was not. Although there appears to be a slight increase in awareness about fresh water pollution the change in the last five years is not great as the net increase in knowledge is seven percentage points.

Respondents also seem to understand that storm drains discharge into creeks and Bays. Eighty-percent said that it was probably/definitely true while only 11% said it was probably/definitely not true.

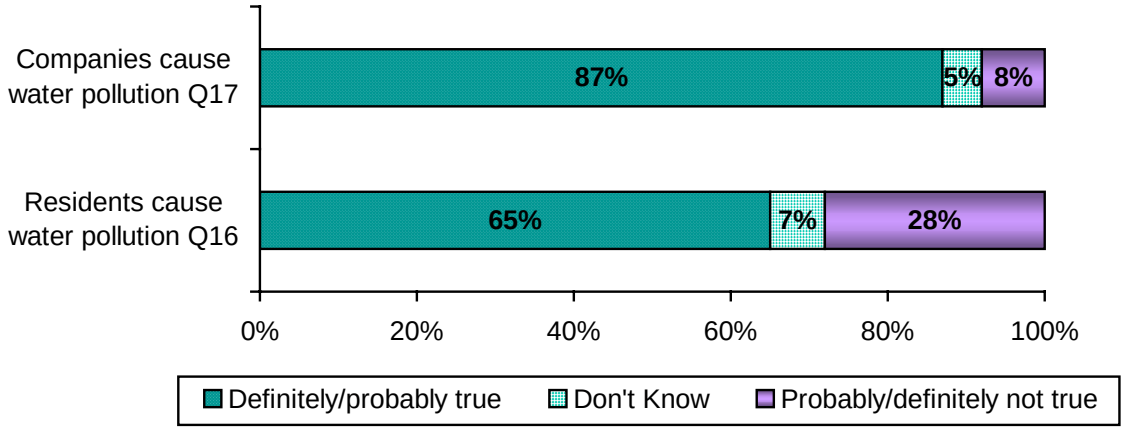
The residents in the area are confused about the storm drains. On the whole they understand or know that freshwater damaged the salt marsh habitats, they understand that the storm drains discharge into creeks and Bays but they do not know that sewers and storm drains are not the same thing. They also believe that the water flowing through storm drains is being treated.

Graph 3: Storm drain and pollution knowledge



Respondents are quick to believe that companies cause water pollution but for some reason do not feel that they themselves are causing the pollution. Twenty-eight percent of respondents said that they thought that resident's probably/definitely did not cause water pollution while only 8% said the same with regards to companies.

Graph 4: Storm drain polluters



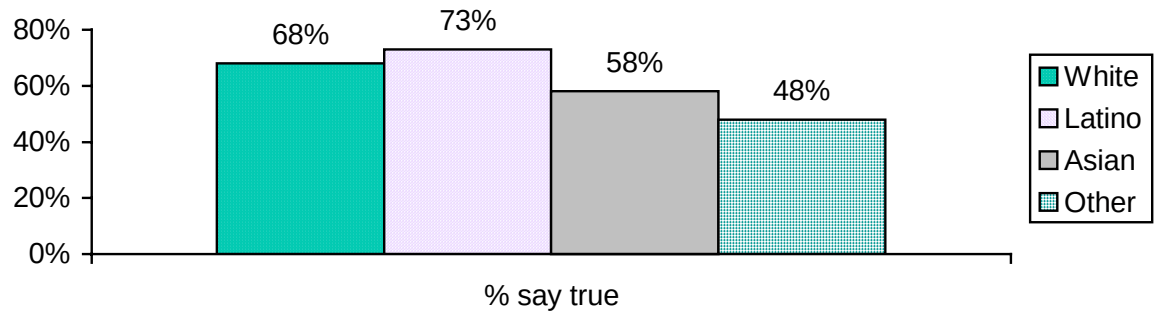
Demographic Differences

Latinos are far more likely to believe that "the water and other substances that flow through the storm drain system are treated and filtered to remove wastes before they are discharged from the system" statement is true. Sixty-seven percent thought it was definitely or probably true (14% of total), while in comparison only 43% of whites (20% of total) said the same.

Asian respondents were much less likely to think that things put in the storm drains go directly into creeks and the Bay – 24% said it wasn't true (4% of total). In comparison 9% of Latinos (2% of total) and 7% of Whites (4% of total) said the same.

Differences by ethnicity regarding 'private residents are responsible for causing water pollution' are significant. The graph below shows those who believe the statement is definitely or somewhat true by race.

Graph 5: Private residents cause pollution by ethnicity



4. Storm Drain Pollution

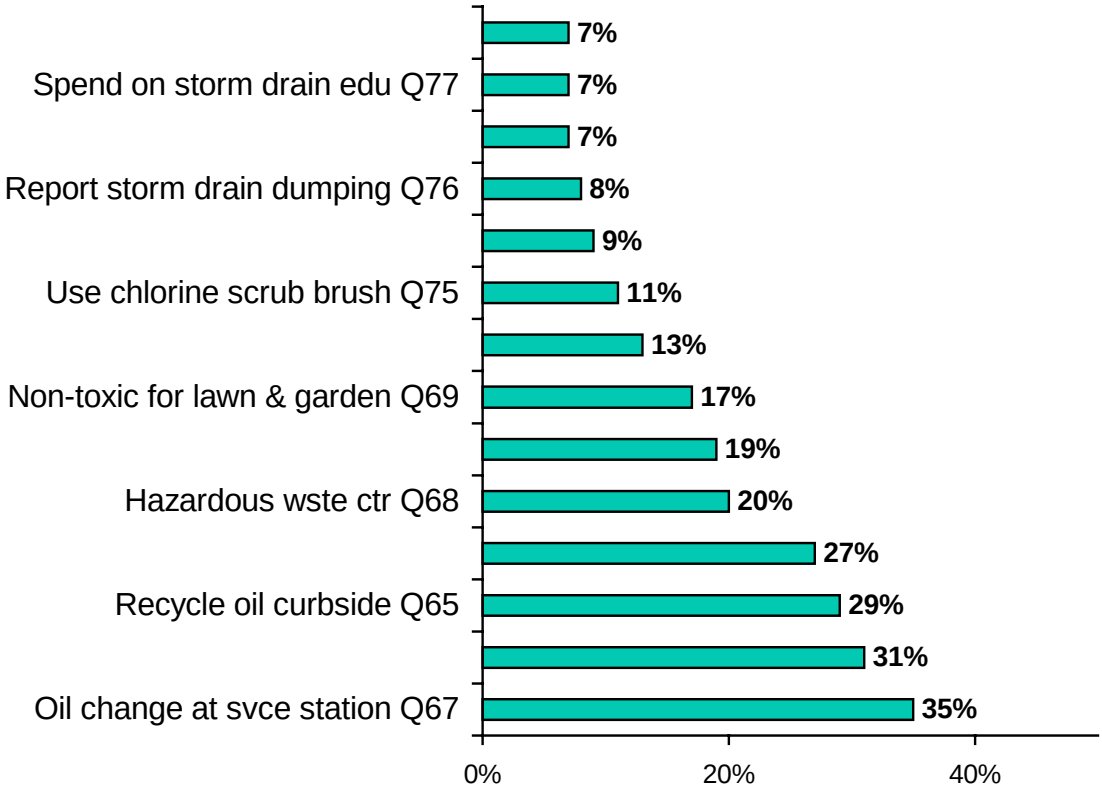
The last section of the survey asks respondents the following:

> "In the Santa Clara Valley, the storm drain system is separate from the sewer system. The storm drain system empties into local creeks and wetlands and into the San Francisco Bay. The mixture of water, trash and everything else that ends up in storm drains is not treated or filtered before it is discharged. What flows through the storm drains pollutes local creeks, wetlands and the bay.
>
> Here are some actions people can take to keep pollution out of storm drains so it won't harm local creeks, wetlands, and the San Francisco Bay. For each one I mention, please tell me how willing you would be to take that action. If it is something you already do, or it really doesn't apply to you, you can tell me that too."

Although not many people are doing most of the different actions tested there appears to be a high level of receptiveness to change. Getting your oil changed at a service station rather than doing it yourself was the most common action taken by most respondents – 33% do it now. Another common action respondents "do now" is taking their car to the car wash (29%). However, both these actions probably have more to do with convenience than concerns about pollution. Actions that may have a stronger correlation to efforts against pollution include recycling used motor oil curbside (25% do now) and sweeping down their driveway with a broom instead of hosing it down (24%).

Few people appear to be doing most of the actions that we proposed. Below is a graph that shows the percent of people who are currently doing the proposed actions, excluding those people who responded that the action 'does not apply'. For example, in questions that relate to swimming pools, only people who have swimming pools etc. are being considered. Although the majority of the percentages do not change drastically if the 'does not apply' respondents are included the percentages perhaps show a bit more clearly where respondents fall in terms of actions they are currently taking.

Graph 6 : Percent of respondents who 'do' these actions now



Comparing the data from 2002 with the '99 FMMA survey people do not appear to have changed their actions a great deal. In fact, the data shows that fewer people are currently doing the actions we

proposed. Below is a table that highlights all of the actions that have changed significantly. It is important to note that some of these differences may be due to sampling differences in the two surveys.

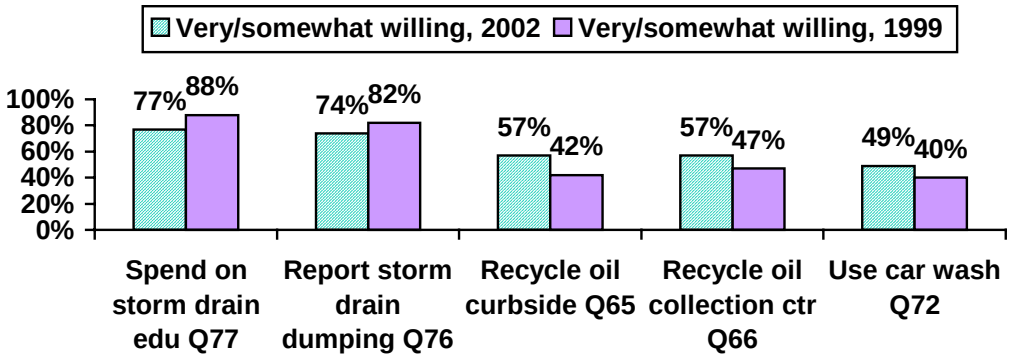
Table VI.6.1	% Do Now		
	2002	1999	Change
Q65. Recycle used motor oil by placing it out for curbside collection;	25%	39	-14
Q66. Recycle used oil by taking it to a collection center	15	26	-11
Q72. Take your car to a car wash instead of washing it yourself in the street or driveway	29	38	-9
Q68. Take leftover paints, insecticides and other Hazardous Wastes to a Household Hazardous Waste collection center	18	25	-7
Q71. Sweep down your driveway with a broom instead of hosing it down with water	24	30	-6
Q69. Use non-toxic substances rather than pesticides and herbicides to control pests and weeds in your lawn and garden	14	20	-6

Although many people are not doing the proposed actions that may help prevent pollution of the storm drains most respondents are willing to make some changes.

- People were most willing to spend public funds to educate about storm drain pollution -77% very/somewhat willing;
- Report dumping of harmful substances in storm drains -74%
- Pay more for non-polluting brake pads -73%.
- High levels of unwillingness occur for participating in creek clean-ups -28% not too/not at all willing;
- And 19% are not willing to wash their car on an unpaved surface instead of in the street or driveway.

Differences from the '99 FMMA in willingness to partake in different actions are low on the majority of the questions. Those with significant differences are in the graph below.

Graph 7: Willingness by year



Although on the whole people are not familiar with the term watershed, nor have they heard of the Watershed Watch, people are willing to prevent pollution in storm drains. Many people are not currently doing things to prevent pollution but most are willing to change their ways. Despite the fact that in many cases fewer people are currently doing things like taking their used motor oil to recycling center than in '99, it seems that more people are willing to do so now than before.

5. Strategic Recommendations

- Awareness of the term "watershed" is extremely low and there is confusion about the differences between storm drains and sewers. One of the goals of the Watershed program is to increase awareness of the watershed over time, in order to foster a desire to care for the watershed. Communicating the term watershed alone is confusing. The community may gain a better understanding if, in addition to a definition, they get a description of where water goes after they wash their car in the driveway and what effect that has on the watershed.
- In order to reduce pollution, communication should be focused on specific actions that could help prevent pollution of the watershed. Survey respondents indicate that they are willing to take pollution prevention actions, but since they are not taking these actions currently it is likely that they just don't know that some of the things they do now pollute the storm drain. The following are a few efforts that are easy to do and are applicable to most people

  - Using non-polluting brake pads on cars;

  - Taking left over paints, insecticides and other hazardous wastes to household hazardous waste collection centers;

  - Using non-toxic substances rather than pesticides and herbicides to control pests and weeds in lawns and gardens;

  - Sweeping down the driveway with a broom instead of hosing it down with water.